# A BALANCE BEAM ASSEMBLY

## BACKGROUND OF THE INVENTION

**[0001]** This invention related to a stepped and extendable balance beam assembly that be safely locked and easily extended in a multiplicity of directions and subsequently folded up for easy storage. The balance beam assembly of this invention may be positioned to extend along a supporting surface, such as a floor, in a variety of locked positions to allow persons to balance and walk on the stepped and extendable balance beam sections in a multiplicity of directions.

**[0002]** Balance beams have been developed in many sizes and shapes. The most common being the balance beams having one upright elongated relatively thin beam which is fixedly supported at each end to maintain the balance beam in an upright position and allow a person to balance and walk on its upward planar surface. Balance beams have been developed which provide for more than one balance beam section to be hinged together by a peg and hole arrangement to allow a person to walk over a plurality of balance beam sections and thereafter be disassembled into their balance beam component parts. None of these balance beam arrangements provide for a balance beam assembly which may be extended in a multiplicity of positions on a supporting surface in a step relationship to increase the degree of difficulty and challenge for a person to balance and walk from one end of the balance beam assembly to the other and which may subsequently b e folded up with one balance beam section being positioned above the next to form a compact arrangement for easy handling and storage.

## SUMMARY OF THE INVENTION

**[0003]** This invention relates to an extendable balance beam assembly comprising a connecting base having upper and Iowa planar surfaces, a plurality of elongated balance beam sections and a plurality of supporting bases adapted to be positioned beneath each balance beam section. The balance beam sections are integrally attached to one another in a step relationship and rotatably secured to one another with at least one balance beam section rotatably attached to the connecting base. By extending the balance beam sections along a supporting surface, such as a floor, in a variety of locked positions, a person is able to safely walk on the stepped and extended

balance beam sections in a multiplicity of directions other than simply walking in a straight line on a balance beam.

**[0004]** The balance beam assembly of this invention also is provided with an arrangement whereby the balance beam sections are locked into a fixed position after they are extended to provide for a safe and challenging endeavor for a person to balance and walk on for practice and exercise.

**[0005]** These and other advantages and salient features of the invention will become apparent from the following detailed description, which taken in conjunction with the annexed drawings, discloses a preferred, but non-limiting, embodiment of the invention.

## DESCRIPTION OF THE PREFERRED EMBODIMENTS

**[0006]** The detailed embodiments of the present invention are described herein. It should be understood, however, that the disclosed embodiments are merely exemplary of the invention, which may be embodied in various forms. Therefore, the details disclosed herein are not to be interpreted as limiting, but merely as the basis for the claims and as a basis for teaching one skilled in the art how to make and/or use the invention.

**[0007]** With reference to Fig. 1, the stepped and extendable balance beam assembly of this invention comprises a first connecting base 1 having an upper planar surface 2 and a lower planar surface 3. The balance beam assembly also has a stepped and elongated balance beam section 4 having a generally rectangular cross section and having an upper planar surface 5 upon which a person may walk and balance. The balance beam 4 is rotatably secured to the connecting base 1 by means of a bolt 6, a washer 6.1 and a nut 7. It is understood that the nut 7 and its Companion washer 6.1 be countersunk into the bottom of the connecting base such that the connecting base may lay flat on a supporting surface. In order to insure that the head of the bolt 6 does not protrude above the upper surface 5 of the balance beam section 4, the head of the bolt 6 is countersunk into the balance beam section 4. The balance beam section 4 is adapted to rotate because of the presence of a washer 8 which is positioned between the lower planar surface 9 of the balance beam section 4 and the upper surface 2 of the connecting base 1. The connecting base 1 adapted to support one additional balance beam section 4.1 positioned immediately adjacent to

the balance beam section 4. The balance beam section 4.1 is rotatably secured to the connecting base 1 by means of a similar nut, washer and bolt arrangement as previously set forth with respect to the means for attaching the balance beam section 4 to the connecting base 1.

**[0008]** A first supporting base 10 is adapted to be positioned beneath the balance beam section 4 at a point distant from the point at which the beam section 4 is secured to the connecting base i. The sides of the first supporting base 10 are trapezoidal in configuration such that the base of the trapezoidal configuration is larger than its up most surface. This configuration results in the construction of a very stable supporting base 10. The first supporting base 10 has a upwardly extending U-shaped cross-sectional ledge 10.1 onto which the lower planar surface 9 of the balance beam section 4 may rest. See Fig. 10.

**[0009]** It will be apparent that additional balance beam sections 12 and corresponding supporting bases 13 may extend from the balance beam section 4 and its corresponding supporting base 10. See Figs. 2, 3, and 4. By rotatably securing additional balance beam sections 12 to the first balance beam section 4, each additional supporting base 13 carries a height progressively greater from the supporting surface than the height of the adjacent supporting base 13 as the distance from the connecting base I increases to the end of the balance beam assembly.

**[0010]** The balance beam section 4 carries a pair of vertically arranged and inwardly extending grooves 4.1 positioned near the bolt 6.1, See Fig. 7. The first supporting base 10 also carries a pair of vertically arranged tongues 10.2. The tongues 10.2 are adapted to slide vertically within the grooves 4.1 of the balance beam section 4 to lock the balance beam section 4 to the first supporting base 10 to allow persons to safely balance and walk on the balance beam section 4.

**[0011]** It is understood that additional balance beam sections 12 may be rotatably secured to adjacent balance beam sections 12 by means of a similar nut and bolt arrangement as previously described. It will be apparent that as additional balance beam sections 12 are attached to and extended from one another, the resulting balance beam assembly forms a plurality of stepped balance beam sections increasing the degree of difficulty and challenge for a person to walk from one end of the balance beam assembly to the other.

**[0012]** It is understood that since an additional balance beam section 4.1 may be secured to the connecting base 1, additional balance beam sections and corresponding additional supporting bases may extend outwardly from the balance beam section 4.1 in the same manner as set forth previously. It is apparent that the balance beam section 4 and the balance beam section 4.1 must be attached to the connecting base I a sufficient distance from one another to allow each balance b cam section 4 and 4.1 to rotate about the connecting base 1 without interfering with one another.

**[0013]** One of the features of this invention is the ability of each group of balance beam sections to be rotated so a s to be positioned one on top of each other. In this manner the extendable balance beam assembly may be collapsed, with one balance beam section being positioned over its immediately adjacent balance beam section to form a compact arrangement for easy handling and storage. See Figs. 5 and 6.

**[0014]** It should be understood that the particular methods of securing the balance beam sections to each other and to the connecting bases, as particularity described herein, may be modified and varied by using other well known attaching means and still be well within the scope of the invention. The particular materials that may be used in the manufacture of the individual components of this invention may include wood, plastic or other well known similarly structural materials.

**[0015]** While various preferred embodiments have been shown and described, it will be understood that there is no invent to limit the invention by such disclosure, but, rather, it is intended to cover all modifications and alternative constructions falling within the spirit and scope of the invention as defined in the appended claims.

What is claimed: